

DAILY LOG

CRUISE
NUMBER

2003-01

INSTITUTE OF OCEAN SCIENCES

OCEAN SCIENCES AND PRODUCTIVITY DIVISION

DATE

4 - FEBRUARY 2003

VESSEL

JOHN P TULLY

PROJECT

LINE P / ARGO

Cruise 2003-01 : Line P / Argo, February 2003

CTD used: 0550

Deck Unit: 0619

35 CTD/Rosette casts were done during this cruise (1-54)

13 casts were full rosette casts, with bottles closed to get a profile.

- 1 Si03 station in Saanich Inlet

- 5 Argo stations along the Argo line

- 1 Calibration cast close to Papa (all bottles closed at 1500m)

- 6 stations along Line P – P26, P20, P16, P12, P8, P4

1 cast was done as CTD only, no bottle closed

- Cast 17 at the Solas mooring site

21 casts were CTD casts, with 1 bottle closed at 10 m for surface samples. All are along Line P.

Casts 1 and 53 had the Par sensor on.

Cast 54 had the PAR sensor and Surface PAR sensor on.

All the casts had

- Transmissometer/Wetlabs

- SBE 43 Oxygen Sensor – primary side

- Seapoint Fluorometer – secondary side

No cast was done with the stand-alone CTD.

Marie Robert

Captain:	JOHN ANDERSON	First Officer:	MIKE SHUCK BURG
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Second Officer: MALE CUNNINGHAM Third Officer: DOUG MUEDELL

Mission Participants / Agencies: Los

Scientific Personnel: _____ Party Chief: MARIE ROBERT 8-12 A

[illegible]

Second leg of Mission: Party Chief:

[illegible]

Data logging computer: FS01

Data acquisition program: Seasave Win32 Ver 5.27c

CTD deck unit make: Seabird model: 11plus serial number: 0619

Primary CTD

Make: Seabird model: 911 plus serial number: 0550
 Primary temperature sensor serial number: 2095 Calibration date: 23-Jan-03
 Primary conductivity sensor serial number: 2280 Calibration date: 23-Jan-03
 Secondary temperature sensor serial number: 2710 Calibration date: 23-Jan-03
 Secondary conductivity sensor serial number: 2278 Calibration date: 23-Jan-03
 Other sensors: SE43 Oxy Sensor s/n: PR1 310E
 Other sensors: Seapoint Fluorometer s/n: 3356 SEC 310E
 Other sensors: Transmissometer/Lutlabs s/n: 498 DR
 Other sensors: s/n:

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature sensor serial number: _____ Calibration date: _____

Primary conductivity sensor serial number: _____ Calibration date: _____

Secondary temperature sensor serial number: _____ Calibration date: _____

Secondary conductivity sensor serial number: _____ Calibration date: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Other sensors: _____ s/n: _____

Comments: _____

Winches:

HAWSBOLT

1. Swann model: 33242/s	serial #: 17026	use: Primary winch for CTD/Rosettes.
2. Swann model: "	serial #: 17027	use: Spare CTD winch Not used.
3. Swann model: 320	serial #: 1207	use: Bongos
4. Swann model: 420	serial #: 1432	use: Iron Go-Flo's + pumping
5. Swann model: _____	serial #: _____	use: _____
6. Swann model: _____	serial #: _____	use: _____
7. Swann model: _____	serial #: _____	use: _____

Comments: _____

Salinometer: make: _____ model: B410 serial number: 59724
Comments: _____

Surface Temperature / Salinity Data Logging System:

Program: _____

Sampling interval (seconds): _____

Sensor serial number: _____

Comments: _____

ADCP Setup:

Program version: _____

Time zone: _____

Sampling interval (seconds): _____

Blank beyond transmit: _____

% pings good threshold: _____

Comments: _____

Number of depth bins: _____

Bin length (2X): _____

Pulse length: _____

Pings per ensemble: _____

Comments: _____

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Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
4 ⁵	SIO3	ROS	00:46	BE	1	48 35.63	123 30.02		224					
			00:52	BO		48 35.62	123 30.03			212	1-13	13	DA	
			01:05	EN		48 35.59	123 30.07							
5	JF1	Loop	2231			48'15.835	123'30.166		161				ST	
6	JF2	Loop	00:07			48'18.001	124'00.067		186				ST	
6	JF3	Loop	01:54			48'26.960	124'30.080		225				KH	
6	JF4	Loop	03:29			48'32.30	124'57.400		64.				KH	
6	Loop 1	Loop	0759			47'43.39	125'25.27							
6	Loop 2	Loop	1159			46 54.61	121 ^{5??} 42 38		1162				DA	LOOPS TAKEN W/VP 204
6	Loop 3	Loop	1600			46'06.23	125'52.62		2599				MR/DT	Loop 3
6	Loop 4	Loop	2000			45'18.85	126'17.36		2733				ST	
7	Loop 5	Loop	00:00			44'32.90	126'19.18		2876				KH	SA TEMP 11.06°C
8 ⁷	Loop 6	Loop	0403			43 44.258	126 14 348							11.2° Surf. temp
9 ⁷	Loop 7	Loop	0759			43'00.661	126'12.238		2490				ST	
7	Loop 8	Loop	12:00			42'11.79	126'07.64		2700				KH	SA TEMP 12.0°
7	Loop 9	Loop	1605			41 22 565	126 01 720							11.8 surf. temp
7	Argo 5	NET	1824	BO	2	41 00.05	125 59 96			250				Bongo to 250 m
			1835	EN		40 59 90	125 59 80							

Cast type:

BOT = otter cast
CTD = CTD
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DRF = drifter

USW = sea water loop

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7	Argo 5	ROS	1849	BE	3	41°00.00	125°59.99		1720 Bottom					Speed 1/2 on control so 2 m/s. Boat 200m.
			1922	BO		41°00.01	126°00.04			2000	14-33	20	MR/ST	Sec T = 0.000 @ beg.
			2006	EN		41°00.02	126°00.04							Loop 10 taken @ 10m?
	Loop 10		2005			41°00.02	125°59.99							
7	Argo 5	DRF	2024			40°59.95	125°59.99							Deploy Pl. 329
7	Loop 11	Loop	2359			41°06.71	126°45.69			3000				SA TEMP 12.9°C
8	Loop 12	Loop	0400			41°16.381	127°40.897							Surf. Temp. 11.712
8	Loop 13	Loop	0803			41°25.09	128°35.198			N/A				
8	ARGO 4	ROS	1053	BE	4	41°29.97	129°00.02		2015		34-53	20		These 2 consec #'s should have been reversed. ← Bongo was first. (ST.) ops.
			1129	BO		41°30.08	129°00.66			2000				
			1228	EN		41°29.33	129°02.07							
		NET	1021	BO	5	41°29.80	129°00.33			250m				
8	Argo 4	DRF	1239			41°29.19	129°02.29				Float 327			
8	Loop 14	Loop	1600			41°34.71	129°46.53							
8	Loop 15	Loop	2000			41°47.56	130°38.25		3306				JZ	
8	Loop 16	Loop	2359			41°54.70	131°29.40		3650					SA TEMP 12.2°C restack thermosal 1.5 hr behind
9	Argo 3	Bongo	0240	BE	6	42°00.11	132°00.10		3827					Paint in Fluorescer side of Bony
9	Argo 3	ROS			7									
					↓									

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9	ARGO 3	ROS	0424	BO	7	41° 59.98	132° 00.02		3821					Loop 17 taken @ 10m ↑
			0452	BO		42° 00.01	131° 59.93				54-73	20	MR	"This program began op" @ end of cast.
			0540	EN		41° 59.95	131° 59.93							
9	ARGO 3	DRF	0553			41° 59.69	132° 00.03							Deploy float 518
9	Loop 18	Loop	0800			42° 03.82	132° 26.29		3859				52	
9	Loop 19	Loop	12:00			42° 14.40	133° 17.18		3775					SA TEMP 12.3°C
9	Loop 20	Loop	1600			42° 22.745	134° 10.702		3959					
9	Argo 2	DRF	1939			42° 29.83	134° 58.43		3922					Deploy 510 1m 5 sta.
9	Argo 2	NET	2014	BO	8	42° 30.03	135° 00.18		3961	250			ST/52	
			2020	EN		42° 29.99	135° 00.16							(time approx.)
9	Argo 2	ROS	2033	BO	9	42° 29.98	135° 00.11		3961					
			2105	BO		42° 30.02	135° 00.03				74-93	20		
			2146	EN		42° 29.99	134° 59.97							
9	Loop 21	Loop	23:59			42° 34.00	135° 26.95		3886					SA TEMP 11.7
10	Loop 22	Loop	0400			42° 43.04	136° 23.24		4070					
10	Loop 23	Loop	0758			42° 53.79	137° 19.04		4099					
10	ARGO 1	NET	11:16	BO	10	43° 00.00	138° 00.17		4125				ST.	
			1120	EN		43° 00.00	138° 00.08			250				

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	AA60 1	ROS	1135	BE	11	42° 59.97	138° 00.04		4124	2000				
			1209	BO		42° 59.88	137° 59.97				94-113	20	UA	
			1304	EN		43° 00.00	138° 00.00							
10	Loop 24	Loop	1600			43° 20.690	138° 23.962		4154.5					10.173 surf. temp
10	Loop 25	Loop	2000			43° 53.562	139° 00.241							
11	Loop 26	Loop	00:00			44° 26.21	139° 35.55		4320					SA TEMP. 10.2
11	Loop 27	Loop	0400			44° 59.31	140° 13.01		4348					
11	Loop 28	Loop	0800			45° 31.587	140° 41.946		4398				JZ	8.906 surf temp
11	Loop 29	Loop	12:00			46° 04.010	141° 28.340		4430					8.5 SA TEMP
11	Loop 30	Loop	1600			46° 36.584	142° 07.082		4408					8.26 surf. temp
11	Loop 31	Loop	2007			47° 09.760	142° 46.591		4469					
12	Loop 32	Loop	0000			47° 42.270	143° 25.30		4417					SA TEMP 7.6
12	Loop 33	Loop	0400			48° 14.180	144° 02.720		4406					6.8 surf. temp.
12	Loop 34	Loop	0810			48° 47.41	144° 44.69		4356					6.4 surf temp.
12	Loop 35	Loop	1200			49° 21.00	145° 08.50		4281					SA TEMP 6.3
12	Solo	DRF	1727			50° 10.007	145° 30.100		4285					Deploy Solo 2121
12	Solo	DRF	1731			50° 09.962	145° 30.210		4285					Deploy Solo 2123

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12	Solo	Ros	1804	BE	12	50° 06.95	145° 29.81		4280					CALIBRATION CAST
			1832	Bo		50° 06.97	145° 29.92			1500	114-137	24		1500 m
			1859	EN		50° 07.02	145° 29.98							
	P26	Go Flos	2315	Bo	13	50° 00.205	144° 59.803		4213	400				300 + 400 m casts
13	P26	Bongo	2352	BE	14	50 00.04	144 59.98		4219					
	P26	Go Flos	1615 local		15	50.00.19	144. 59.66.			800 m				600 + 800 m casts
13	P26	Ros	0122	BE	16	50° 00.18	144° 59.53		4223					
			0233	Bo		50 00 20	144 59.80			4302	138-161	24	DA	Wind: 15 knt
			0359	EN		50 00.15	144 59.94							Loop 36 @ 10 m
13	SOLAS	Ros	0751	BE	17	50° 01.62	144° 57.99		4215				ST.	Shallow cast @
			0755	Bo		50° 01.63	144° 58.01			200		Ø		SOLAS mooring site
			0758	EN		50 01.63	144° 58.00							
13	P26	Go Flos	0840	Bo	18	50 00.01	145 00.01			200		2	ST.	Times are approximate.
	"		0900	Bo	19	50 00.02	145.00.06			150		2.		
13	P35	Ros	1713	BE	20	50° 00.07	144° 17.97		4124					Down to 10m then
			1743	Bo		50° 00.25	144° 17.85			1500	162	1	MR	Back to 0, see note →
			1804	EN		50° 00.36	144° 17.62							

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There seem to be a bug with the display.

If i select T_1 , S_1 , X , and O_2 on the graph window, S_2 does NOT update on the value window. Thought S_2 was stuck, that's why i went down to 10 then back up. Then changed graph window to T_1 , S_1 , S_2 , X , and S_2 updated on value window?

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13	P25	ROS	2107	BE	21	50° 00.03	143° 36.41		3868		163	1	ST	25 surface loop at 10m.	
			2132	BO		50° 00.00	143° 36.30			1500					
			2150	EN		50° 00.01	143° 36.31								
14	P24	ROS	0157	BE	22	49° 50.17	142° 40.07		3964					Cleaned X-miss.	
			0216	BO		49° 50.20	142° 40.01			1500	164	1	DA		
			0234	EN		49° 50.20	142° 39.99								
14	P23	ROS	0651	BE	23	49° 46.02	141° 40.06		4029						
			0713	BO		49° 46.00	141° 40.03			1500	165	1	MR		
			0734	EN		49° 46.01	141° 40.00								
14	P22	ROS	1206	BE	24	49° 42.01	140° 40.01		3890		166	1	ST	INTERESTING T _{in} thermal, P22 to P21	
			1227	BO		49° 42.00	140° 40.02			1500					
			1247	EN		49° 41.99	140° 39.99								
14	P21	ROS	1655	BE	25	49° 38.00	139° 40.02		3937					Loop 37 @ 10m ↑	
			1718	BO		49° 38.02	139° 40.01			1500	167	1	MR		
			1737	EN		49° 38.00	139° 40.00								
14	P20	NET	2149	BO	26	49° 33.94	138° 40.033		3944	256			ST.		
			2153	EN		49° 33.94	138° 40.033							time approx.	
14	P20	GoFlos	1125 PST	BE	27	49° 34.00	138° 39.94			600		2	NR		
			22:58	BO		49° 33.994	138° 39.973								

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14	P20	ROS	2303	BE	28	49°33.99	138°39.86		3880					
15			0006	BO		49°34.00	138°40.00			4002	168-191	24		
			0130	EN		49°34.00	138°40.01							
15	P20	GoFlo	0200		29	49°34.06	138°39.91			200		2	NBS.	
15	P19	ROS	0929	BE	30	49°30.01	137°40.00		3900					
			0951	BO		49°30.01	137°40.00			1500	192	1	ST.	
			1012	EN		49°30.00	137°40.00							
15	P18	ROS	1418	BE	31	49°25.99	136°40.04		3817					
			1441	BO		49°26.00	136°40.01			1501	193	1	DA	
			1501	EN		49°26.00	136°40.01							
15	P17	ROS	1913	BE	32	49°19.28	135°39.81		3575					
			1936	BO		49°19.26	135°39.60				194	1	MR	
			1956	EN		49°19.27	135°39.54							
16	P16	NET	0005	BE	33	49°16.99	134°39.94		3621				DA	
	P16	ROS	0036	BE	34	49°16.99	134°39.96		3621					
			0139	BO		49°17.01	134°40.00			3677	195-218	24	DA	+Loop 38
			0231	EN		49°17.01	134°39.99							

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16	P16	Go-Flot	0417		35	49 16.98	134 39.80		3619	200				
	P15	ROS	1043	BE	36	49 11.99	133 39.98							
			1105	BO		49 11.99	133 40.00		3499	1500	219	1	S.T.	
			1125	EN		49 12.00	133 39.99							
16	P14	ROS	1546	BE	37	49 07.42	132 40.05							-looked like some
			1610	BO		49 07.40	132 40.06		3309		220	1	DA	stringy jellyfish parts?)
			1629	EN		49 07.41	132 40.01				+Loop 39			caught over the right
16	P13	ROS	2058	BE	38	49 02.54	131 39.00 ⁸⁹		2977				S.T.	conductivity cell on the
			2122	BO		49 02.58	131 40.04			1500	221?	1?		(TD when we brought
			2141	EN		49 02.60	131 40.03							it aboard. (ST)
														hopper winch broken, sea
17	P12	NET	0151	BE	39	48 58.19	130 39.95		3227	250				over
17	P12	ROS	0218	BE	40	48 58.17	130 39.99		3229					Nisk 22 did not fire,
			0315	BO		48 58.20	130 40.01			3261	222-244	23	DA	take loop 40 instead
			0423	EN		48 58.27	130 39.99							
17	P12	Go-Flot	0638		41	48 58.25	130 39.79		3229	200m				
17	P11	ROS	1008	BE	42	48 56.03	130 09.97							
			1030	BO		48 56.00	130 09.99		2753					
			1048	EN		48 56.01	130 09.97			1500	245?	1?		

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lubber winch was broken at the end of the cast.
likely got caught on the tie down and snapped. JZ

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17	P10	ROS	13:03	BE	43	48 53.60	129 39.99		2638					
			13:26	BO		48 53.60	129 39.99			1500	246	1	DA	
			13:47	EN		48 53.61	129 39.99							
17	P9	ROS	1610	BE	44	48 51.40	129 09.99		2343					
			1634	BO		48 51.41	129 10.02			1501	247	1	MR	
			1656	EN		48 51.41	129 10.01							
17	P8	NET	1950	BO	45	48 49.01	129 40.00		2518	250			MR	
			1955	EN		48 49.01	129 40.01							
17	P8	ROS	2009	BE	46	48 49.03	128 40.04		2518				ST	
			2035	BO		48 49.02	128 40.02			1500	248-266	19		I forgot take Eric's samples. (ST) (sorry)
			2112	EN		48 49.07	128 40.10							
17	P7	ROS	2350	BE	47	48 46.63	128 10.04		2506					
18			0016	BO		48 46.64	128 09.96			1500	267	1	DA	
			0034	EN		48 46.63	128 09.97							
18	P6	ROS	0251	BE	48	48 44.62	127 40.02		2543					
			0316	BO		48 44.64	127 40.03			1500	268	1	DA	cleaned X miss
			0335	EN		48 44.64	127 40.03							

Cast type:

BOT = otter cast
CTD = CTD
MOR = mooring

ROS = Rosette
NET = net haul
DRF = drifter

USW = sea water loop

Time Code

BE = beginning time of cast
BO = bottom time of cast
EN = end of cast time

DE = deployment time

MR = messenger release time
RE = recover mooring time

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Year 2003					Month FEBRUARY			Ship JOHN P TULLY				Cruise I.D. 2003-01		
Day	Station I.D.	Cast Type	Time (UTC)	Time Code	Consec. Number	Latitude	Longitude	Position Code	Bottom Depth	Max Depth	Consec Sample #	# of Bottles	initials	Comments
18	P5	ROS	0603	BE	49	48 41.49	127 09 94		2090					Big DIFFERENCE
			0626	BO		48 41.47	127 09 83			1500	269	1		BETWEEN TWO SENSORS ?
			0647	EN		48 41.51	127 09.75							
	P4	NE	0924	BO	50	48 39.05	126 39 98						S.T.	
			0930	EN		48 39.13	126 40.05			250				approx time
18	P4	ROS	0942	BE	51	48 39.13	126 40.05	1	1309				S.T.	
			1008	BO		48 39.02	126 40.08			1301	270-288	19		
			1042	EN		48 39.01	126 40.03							
18	P3	ROS	1221	BE	52	48 37.51	126 20.00		809					
			1236	BO		48 37.52	126 20.03			798	289	1	DA	
			1248	EN		48 37.51	126 20.01							
18	P2	ROS	1433	BE	53	48 36.07	126 00.00		115					PAR ON
			1436	BO		48 36.08	126 00.03			105	290	1	DA	Changed PR1 Pump
			1439	EN		48 36.10	126 00.06							
18	P1	ROS	1655	BE	54	48 34.51	125 30.00		116					SURFACE PAR ON
			1659	BO		48 34.52	125 30.02			88	291	1	MR	
			1702	EN		48 34.51	125 30.00							

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